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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/732,135	12/07/2000	Roshan J. Samuel	TI-31249	1005

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EXAMINER
DANG, KHANH NMN

ART UNIT	PAPER NUMBER
2181	4

DATE MAILED: 05/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/732,135	SAMUEL ET AL.	
	Examiner	Art Unit	
	Khanh Dang	2181	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 112

Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With regard to claims 1-4, the essential structural cooperative relationships between the so-called "control signal generator" and "clock edge selector circuit" and other recited elements in claim 1 have been omitted, such omission amounting to a gap between the necessary structural connections. MPEP 2172.01.

With regard to claims 5-8, the essential structural cooperative relationships between the so-called "control signal generator," "second multiplexer," and other recited elements in claim 5 have been omitted, such omission amounting to a gap between the necessary structural connections. MPEP 2172.01.

With regard to claims 9-12, the essential structural cooperative relationships between the so-called "control signal generator," "clock edge selector circuit," "second multiplexer," and other recited elements in claim 9 have been omitted, such omission amounting to a gap between the necessary structural connections. MPEP 2172.01.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-12 are rejected under 35 U.S.C. 102(e) as being anticipated by McCracken et al.

At the outset, it is noted that that similar claims will be grouped together to avoid repetition in explanation.

As broadly drafted, claims 1-12 do not define any structure that differs from McCracken et al. With regard to claims 1 and 3, McCracken et al. discloses a state machine input/output circuit responsive to a clock signal having cyclically repeating rising edges and falling edges, for providing data to an output port, comprising: a memory having a plurality of storage elements (DDR-SDRAM 16,18, Fig. 1), each storage element having an input and an output, said input being programmably connectable to processor (col. 1, lines 13-20), for selection of data for storage therein; a first multiplexer (MUX 104) having an output (116, Fig. 3, for example), having a plurality of inputs (See at least Fig. 1) receiving the outputs of said memory, and a

control input for receiving a control signal (106) generated by a control signal generator for controlling the first multiplexer (MUX 104) to select the first multiplexer inputs; and a clock edge selector circuit (44, Fig. 4, for example) for providing, in response to an edge select signal, the output of the first multiplexer (MUX 104) to the output port selectably on either the rising edges or the falling edges of the clock signal. With regard to claim 2, the clock edge selector circuit comprises the input of first and second flip-flops (176, 174) coupled to the output of the multiplexer, the first flip-flop changing states on said rising edge of clock pulse and said second flip-flop changing states on the falling edge of clock pulse; output of the first and second flip-flops (176, 174) coupled to first and second inputs of a second multiplexer (180); the control input (195) of the second multiplexer (180) coupled to the output of an edge select register; and the output of said second multiplexer coupled to the output port. With regard to claim 4, it is clear from the programmable logic and circuit configurations disclosed by McCracken et al. that they are programmable without any prior knowledge of the application device being controlled. With regard to claims 5-12, it is first noted that the words "first," "second," and "third" used liberally and interchangeably by the Applicant to recite different flip-flops and MUXs depending on each drafted independent claim. Therefore, attention should be directed to flips-flops and MUXs of McCracken et al. based on their own characteristics/configurations (explained above), and "fisrt," "second," or "third" should be labeled accordingly. For example, Flip-flop (202) is now readable as a "first flip-flop" recited in claim 5, the remaining flip-flops of Mc Mccracken et al. are readable as "first" or "second" flip-flop according to its own characteristic/configuration as already

explained above. And similarly, in claim 6, MUX (188) is readable as a "third multiplexer." Other claims, as explained and in view of the above, are readily readable on Mccracken et al.

U.S Patent Nos. 6,429,698 to Young, 6,542,999 to Dreps et al., 4,870,418 to Masterson, and 5,986,491 to Grehl et al. are cited as relevant art.

Any inquiry concerning this communication should be directed to Khanh Dang at telephone number 703-308-0211.

Khanh Dang
Primary Examiner